REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-29 are pending in the present application. Claims 1-25 are amended and Claims 26-29 are added by the present invention.

In the outstanding Office Action, the drawings and claims were objected to; Claims 1, 13 and 18-24 were rejected under 35 U.S.C. § 102(e) as anticipated by Östman et al. (hereinafter "Östman"); and Claims 2-12, 14-17 and 25 were indicated as allowable if rewritten in independent form.

Applicants thank the Examiner for the indication of allowable subject matter.

The drawings and appropriate claims are amended in light of the comments noted in the outstanding Office Action. Accordingly, it is respectfully requested these objections be withdrawn.

Claims 1, 13 and 18-24 stand rejected under 35 U.S.C. § 102(e) as anticipated by Östman. This rejection is respectfully traversed.

Amended independent Claim 1 is directed to an apparatus for processing AAL2 supporting multiple virtual channels. The apparatus includes a transmitting part which assigns a corresponding virtual path/channel information of a destination to data from a plurality of AAL2 users, which multiplexes the data having the assigned virtual path/channel information into transmission ATM cells based upon the corresponding assigned virtual

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path/channel information, and which transmits to the corresponding destination a

respective transmission ATM cell through one of a plurality of channels corresponding to

the assigned virtual path/channel information. Also included is a receiving part which

receives an ATM cell through one of the plurality of channels, demultiplexes the received

ATM cell based upon a corresponding virtual path/channel information included in the

ATM cell, and transmits the demultiplexed data to corresponding AAL2 users. Amended

independent method Claim 13 includes similar features in a varying scope.

In a non-limiting example, Figure 5 illustrates a transmitting part 430 which assigns a

corresponding virtual path/channel information (from the multiple VC channels table 420)

corresponding to a destination to data from a plurality of AAL2 users, which multiplexes the

data having the assigned virtual path/channel information into transmission ATM cells

based upon the corresponding assigned virtual path/channel information (e.g., data in

channel #1 are multiplexed together and transmitted, data in channel #2 are multiplexed

together and transmitted, etc). See also Figure 8A and the corresponding description.

Thus, according to the present invention, the capacity of a communication system

better utilizes the fixed data lengths of ATM cells, thereby reducing the amount of padding

required and allowing for the efficient use of multiple virtual channels. Further, using the

corresponding virtual path/channel information (R_Tag), the present invention is able to

support CPS-data packet having a 64 byte packet length, as well as a CPS-data packet having

a traditional 53 byte packet length.

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On the contrary, Östman is only directed to supporting a 53 byte packet length, which is applied to voice transmission. In addition, it is respectfully noted Östman does not teach or suggest multiplexing the data having the assigned virtual path/channel information into transmission ATM cells based upon the corresponding assigned virtual path/channel information. Rather, Östman discloses in column 3, lines 1-5, a multiplexer which multiplexes ATM cells of a second type into an outgoing ATM cell. The multiplexing in Östman is not based upon the an assigned virtual path/channel information (R_Tag). Thus, Östman can not achieve the advantages of the present invention.

In addition, amended independent Claim 18 includes a feature in which virtual channel identification information (R_Tag), corresponding to a destination, is assigned to the protocol data, and protocol data having a same virtual channel identification information is grouped together before the data is transmitted. These features are illustrated in the non-limiting example of Figure 8A. It is respectfully noted Östman does not teach grouping together data having a same virtual channel identification information before the data is transmitted.

Accordingly, it is respectfully submitted amended independent Claim 1, 13 and 18 and each of the claims depending therefrom are allowable.

In addition, new Claims 26-29 have been added to set forth the invention in a varying scope. In particular, new claim 29 corresponds to the transmitting part of claim 1, new claim 27 corresponds to dependent claim 2, new claim 28 corresponds to the receiving part of

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Reply to Office Action of November 5, 2003

claim 1, and new claim 29 corresponds to dependent claim 7. It is respectfully submitted

these claims are allowable for similar reasons as discussed above.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that

the application is in condition for allowance. If the Examiner believes that any additional

changes would place the application in better condition for allowance, the Examiner is

invited to contact the undersigned agent, **David A. Bilodeau**, at the telephone number

listed below.

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In addition, new Claims 26-29 have been added to set forth the invention in a varying

scope. In particular, new claim 29 corresponds to the transmitting part of claim 1, new claim

27 corresponds to dependent claim 2, new claim 28 corresponds to the receiving part of

claim 1, and new claim 29 corresponds to dependent claim 7. It is respectfully submitted

these claims are allowable for similar reasons as discussed above.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that

the application is in condition for allowance. If the Examiner believes that any additional

changes would place the application in better condition for allowance, the Examiner is

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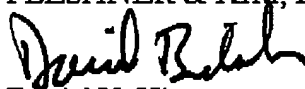Serial No. 09/584,142   Docket No. K-0177
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Reply to Office Action of November 5, 2003

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is

hereby made. Please charge any shortage in fees due in connection with the filing of this,

concurrent and future replies, including extension of time fees, to Deposit Account 16-0607

and please credit any excess fees to such deposit account.

                                         Respectfully submitted,
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